

PLANT PROTECTION DIVISION PEST PROGRAM

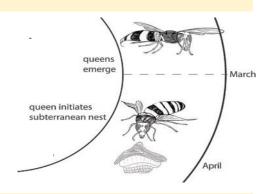
ASIAN GIANT HORNET STAKEHOLDER UPDATE #21.03 - APRIL 21, 2021

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ASIAN GIANT HORNET LIFE CYCLE

In their native range all Asian giant hornet colonies follow a specific life cycle.

As spring is here, the overwintering queens are beginning to emerge. They are known to feed on carbohydrates, like tree sap. Following emergence, they will attempt to found a nest. Unmated queens will be unsuccessful in establishing a functioning nest.



SPRING VISUAL SURVEY



Deceased Queen found in Custer, May 2020

In late May 2020, one deceased mated queen was detected in Custer, WA. In June 2020, one deceased queen was found flattened in Bellingham. The last queen detection involved a deceased unmated queen in Birch Bay in July. The first two reports of queens were detected by the public.

WSDA is asking citizens to participate in a visual survey. Keep your eyes open and report (with a photograph if possible) any suspected Asian giant hornet.

MT. BAKER BEEKEEPER SPRING TRAPPING

At this time of year, beekeepers are beginning to check their hives and get their bees ready for the spring and summer months. In addition to getting their bees ready, some beekeepers are collaborating

with WSDA to deploy experimental traps. They are using a bait mixture known to be popular in the Asian giant hornet's native range consisting of grape juice, rice cooking wine, and Calpis – a fermented soft drink popular in Japan. WSDA is also monitoring spring queen traps in Whatcom County.

WSDA 2021 SURVEY MAP

Each year WSDA creates an Asian giant hornet survey map to help plan trap placement.

First, each confirmed detection from the prior year is plotted. (On this map those are the red circles and triangles.) Using these detection points as the center, WSDA creates an 8 km (about 5 miles) circumference around each center. Next an overlaying gird is added to help plan appropriate trap densities. For 2021 the grid expands to the east, due to detections in British Columbia. WSDA will place Asian giant hornet traps within the gridded areas in July.



CHANGES TO CITIZEN SCIENTIST TRAPPING

Starting in July 2021, WSDA will again ask citizen scientists to help trap Asian giant hornets on their own properties. Last year Washington residents placed 1,255 traps to help detect Asian giant hornets. Residents also collected unique data by returning collections of all the insects found within their traps, which provided valuable information on how the traps affect the environment. These collections helped determine that impacts on non-target species like honey bees and other beneficial pollinators were low, although they captured numerous yellow jackets. As a result, WSDA will be offering digital submission



for trap results in 2021. This means it will not be necessary to package and mail samples, or to leave collections at a drop off site, unless an Asian giant hornet is captured.

Collections toward the end of the season also showed that a large number of fruit flies (mostly the invasive *Drosophila suzukii*) tend to accumulate in the traps. This large volume of drowned flies created a surface for captured hornets to avoid the liquid and escape from the traps. Therefore WSDA is recommending that bottle traps for the 2021 season use a star-shaped opening. This design is used by some beekeepers in Japan, and it could make it harder for the AGH to escape. However, if you saved

bottle traps from 2021, feel free to reuse them and just keep an eye on those flies!

Residents also provided great feedback from the project and noted that it was sometimes difficult to find the rice cooking wine needed for the bait solution. For 2021, WSDA is offering alternative bottle trap instructions that use a bait of dark brown sugar and water. Pennsylvania used such traps from 2016 through 2018 to survey for European hornets. Similar to the results of last year's trapping in Washington, the brown sugar traps were attractive to hornets but didn't catch too many bees. European hornets, unlike our native stinging wasps, are in the same genus as the Asian giant hornet. The bait also only needs to be changed every two weeks, making this alternative trap less expensive and requiring fewer services. WSDA believes this trap will be effective, but it has not been tested for Asian giant hornets



specifically. For more trapping information please visit agr.wa.gov/hornets.

Please refrain from trapping until July. If you trap before July, workers are not yet active and the chance of capturing an Asian giant hornet is quite low. Trapping before July also may catch local insects that are beneficial to Washington.

HUMMINGBIRD FEEDER NOTICE



In the past WSDA has received reports of suspected Asian giant hornets visiting hummingbird feeders.

AGH is about 1/3 to 1/2 as long as a hummingbird. If you have feeders, please keep an eye out, and report if you suspect having seen an Asian giant hornet.

PROPOSED HORNET QUARANTINE

WSDA is proposing to add all species in the genus *Vespa* (hornet) to the list of quarantined pests. The proposed rules would prohibit live life stages of hornet species from being sold, offered for sale, distributed, or knowingly moved throughout or received within Washington. This would not apply to native wasp or yellow jacket species; there are no native *Vespa* in Washington State.

Under the proposed amendment, additional restrictions would apply to "infested sites" - defined as all real property within 20 meters of a nest containing any live life stage of hornet. WSDA will attempt to notify occupants and/or owners of those properties that their property has been designated as an infested site. When an infested site has been designated, no person may enter the area without

authorization until WSDA has deemed it clear of infestation. This limits the risk to public health and safety, and prevents further infestation. The rule clarifies that WSDA inspectors may enter infested sites to remove and treat the nest and hornets. The rule specifically allows property owners and tenants onto a restricted site.

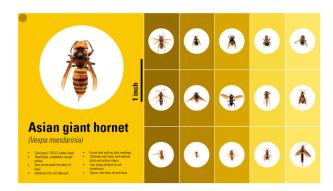
A special permit would be established under the proposed amendment which would allow for the possession of live hornets for research purposes. The department will hold a public hearing on the proposed legislation on May 11, 2021 at 1:00pm. To learn more about this proposal, visit the <u>WSDA rulemaking page for the hornet quarantine</u>.

NEW DETECTIONS

There have been no confirmed sightings of Asian giant hornets reported to WSDA in 2021.

It is still important to be on the lookout: dead or alive, AGH reports are helpful. Any confirmed report can provide detection points to help guide trapping efforts, and collected hornets can aid in future research. If you think you have seen an Asian giant hornet, visit WSDA's hornet webpage to report it online, via email at hornets@agr.wa.gov, or call 1-800-443-6684. Include a photo if you can safely obtain one.

INTERACTIVE ID GUIDE FROM NC EXTENSION



North Carolina Extension Published an <u>interactive</u> <u>identification guide that includes Asian giant</u> <u>hornet</u>. This resource is also available on <u>WSDA's</u> <u>hornet page</u>.

UPDATE FROM CANADA

British Columbia has no additional confirmed detections of Asian giant hornet. They continue to encourage reporting and will trap for Asian giant hornets during the 2021 season.

STAY CONNECTED

WSDA is dedicated to working with the public and to providing information on Asian giant hornets.

Contact hornets@agr.wa.gov if you are interested in a presentation to learn more about Asian giant hornets.

- View past news releases, blogs, and Pest Program updates about Asian giant hornet.
- Join the Asian giant hornet Facebook group.

- Join the <u>Pest Program email listserv</u>.
- Follow WSDA on <u>Facebook</u>, <u>Instagram</u>, <u>YouTube</u>, and <u>Twitter</u>.